

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IL2004/000677

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61C8/00 A61C13/00 A61C13/30 A61C5/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| X          | US 4 758 161 A (NIZNICK GERALD A)<br>19 July 1988 (1988-07-19)<br>column 1, lines 25-38<br>column 2, lines 10-22<br>column 3, lines 31-51; figure 1                                       | 37-40, 50             |
| X          | US 5 695 334 A (FERNANDES AMERICO ET AL)<br>9 December 1997 (1997-12-09)<br>column 2, lines 38-54<br>column 3, lines 28-35<br>column 4, lines 53-64<br>column 6, lines 24-53; figures 1-3 | 37-39, 50             |
| X          | US 5 178 539 A (PELTIER GUY ET AL)<br>12 January 1993 (1993-01-12)<br>column 2, lines 53-55<br>column 3, lines 5-14, 31-43; figure 1  | 37, 38,<br>40, 50     |
|            | -/--  |                       |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

27 October 2004

Date of mailing of the international search report

04/11/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| X          | US 6 358 052 B1 (LUSTIG L PAUL ET AL)<br>19 March 2002 (2002-03-19)<br>column 2, lines 39-58<br>column 6, line 40 - column 7, line 49<br>column 8, lines 42-48; figures 36-44 | 37-39, 50             |
| X          | US 5 662 475 A (MENA RAUL R)<br>2 September 1997 (1997-09-02)<br>column 3, lines 12-17; figures 1,2A  | 37, 38,<br>40, 50     |

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Claims Nos.: 1-18,22,26,27,28,35,36

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

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Continuation of Box II.2

Claims Nos.: 1-36

The present application contains a large number of claims (36 method claims including 9 independent claims and 14 product claims including 4 independent claims), moreover some of the independent claims (1,2,35) relates to a method for forming an abutment while some others (19,23,30) claim a method for forming a dental prosthesis and are interrelated to the first ones by using the wording "that may be...fitted to an abutment...according to...claims...". Some of the independent method claims (1,2 and 35) also contain too often the term "or" between the different step methods so that the subjects of said claims relate to an extremely large number of possible methods.

For the above reasons, it is difficult, if not impossible, to determine the matter for which the protection is sought and therefore the present application fails to comply with the clarity and conciseness requirements of Article 6 PCT (see also Rule 6.1(a) PCT) to such an extent that a meaningful search is impossible.

Some of the claims also relate to methods for treatment of the human or animal body by surgery, such subject will not be searched by the international searching authority according to Rule 39.1(iv) PCT:

In claim 1 see passage "...positioning...prosthesis in the patient jaw..."

In claims 2,35 see passage "...attaching to the dental implant..." (which is inserted in the patient's jaw)

In claims 22 and 26 see passage "...fitting into the patient's mouth..."

Consequently, the search has been carried out for those parts of the application which do appear to be clear (and concise), namely: a method for forming an abutment for interfacing a dental prosthesis to a duplicate dental implant inserted into a model of the patient jaw, the method comprising:

- removably and reproducibly attaching to the duplicate implant an intra-implant element that is bonded to an intra-crown element via a resilient bonding material so as to form a deformable connection between the intra-crown element and the intra-implant element;

- adjusting the intra-crown element relative to the intra-implant element so as to form a model that is properly adjusted to the duplicate implant and is properly positioned to receive a dental prosthesis;

- removing the model abutment from the duplicate implant without

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

deforming the model abutment; and  
using the model abutment to form a permanent abutment.

The documents relevant for this method have been listed under claim 37 in the search report.

Product claims 38,40 and 41 have been understood and searched in the light of the above reasoning.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 1-18, 22, 26, 27, 28, 35, 36  
because they relate to subject matter not required to be searched by this Authority, namely:  
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2. ☒ Claims Nos.: 1-36  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/IL2004/000677

| Patent document<br>cited in search report |    | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|----|---------------------|----------------------------|---------------------|
| US 4758161                                | A  | 19-07-1988          | US RE33796 E               | 14-01-1992          |
| US 5695334                                | A  | 09-12-1997          | NONE                       |                     |
| US 5178539                                | A  | 12-01-1993          | FR 2655534 A1              | 14-06-1991          |
|   |    |                     | CA 2044264 A1              | 13-06-1991          |
|   |    |                     | DE 69026079 D1             | 25-04-1996          |
|   |    |                     | EP 0457874 A1              | 27-11-1991          |
|   |    |                     | WO 9108714 A1              | 27-06-1991          |
|   |    |                     | JP 4503621 T               | 02-07-1992          |
| US 6358052                                | B1 | 19-03-2002          | AU 6077100 A               | 05-02-2001          |
|   |    |                     | WO 0105326 A1              | 25-01-2001          |
|   |    |                     | US 2002127518 A1           | 12-09-2002          |
|   |    |                     | US 2003148246 A1           | 07-08-2003          |
| US 5662475                                | A  | 02-09-1997          | AU 2584997 A               | 22-09-1997          |
|   |    |                     | WO 9732535 A1              | 12-09-1997          |